



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,018	11/21/2005	Khaled Awad Saleh Nashwan	9007-1012	1412
466 7590 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER JOHNSON III, HENRY M	
			ART UNIT 3730	PAPER NUMBER
			MAIL DATE 05/29/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/534,018

**Applicant(s)**

NASHWAN, KHALED AWAD SALEH

**Examiner**

Henry M. Johnson, III

**Art Unit**

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-27 and 31-36 is/are rejected.
- 7) ☒ Claim(s) 28-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 050505 080205
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because they fail to show details of the block as described in the specification. Indicia are required for clear understanding. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities:

On page 4, line 2, the word is should be are..

Appropriate correction is required.

***Claim Objections***

Claim 24 is objected to because of the following informalities: the word "for" on line 3, should be "of". Appropriate correction is required.

Claims 25 and 29 are objected to as known pulsimeters provide a pulse rate and it is unclear how the pulse strength is measured.

Claims 26 and 27 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form. No additional structure is claimed. The controls from previous claims provide all the claimed limitations.

Claim 30 is objected to as a coupling medium has not been positively cited.

Claim 36 is objected to as it add no further limitation. Clearly a method requires at least a single iteration.

Claim 37 is objected to as the wording does not clearly indicate action steps. Providing a heating device and arranging a body portion are examples of clear wording for a method step. Further, it is not clear how the heating device and transducer head can both be positioned on a body portion.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-27 and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "the face" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the projections" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the contour" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 is indefinite as it is not clear how the geometry and superimposition of sound waves takes place. The disclosure provides no guidance.

Claim 32 is indefinite as the limitations do not impart structure to the device as they are related to intended use.

Claim 34 recites the limitation "the waveform" in line 17. There is insufficient antecedent basis for this limitation in the claim. The term waveform is not well defined in the disclosure and appears to refer to the frequency of the transducer rather than a specific waveform.

Claim 34 recites the limitation "the energizing" in line 13. There is insufficient antecedent basis for this limitation in the claim. The examiner believes the intent is to select the frequency of the treatment energy. Also the word "chosing" should be "choosing".

Claim 35 is indefinite as the waveform is not clearly defined in the disclosure.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 3739

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 16 and 33-34 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent 6,575,956 to Brisken et al. Brisken et al. disclose an ultrasound delivery system including a piezoelectric element of an ultrasound transducer that is generally planar and may either be rectangular, circular, or annular in shape. The transducer may comprise a plurality of annular-shaped piezoelectric elements disposed concentrically, one within another (Col. 4, lines 40-45). The transducers may be fabricated from single crystal piezoelectrics, (Col. 11, lines 30-32) and are coupled to the target area by a coupling material (Fig. 11, # 113). The user operates the system through a user interface (Fig. 14, # 141) to a computer or controller subsystem. Through a digital I/O device (Fig. 14, # 143), the computer controls a signal generator to generate the RF driving signal, a modulator to format the number of cycles per burst and to set the burst rate, a variable gain power amplifier, an impedance matching circuit, and finally the transducer (Col. 12, lines 50-57). The ultrasound is produced at frequencies from 20 kHz to 5 MHz (Claim 20). The intensity is disclosed as from 0.01 to 100 W/cm<sup>2</sup> (table 3).

Regarding claim 34, the positively cited steps are providing, arranging, bringing, choosing and applying. When the hardware structure has no affect on the method in a manipulative sense it is given no patentable weight (Ex parte PFEIFFER, 135 USPQ 31 (Bd. Pat. App. & Int. 1961). The steps recited are inherent in the use of the device of Brisken et al.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 3739

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent 6,575,956 to Briskin et al. as applied to claim 16 above and further in view of U.S.

Patent 5,050,588 to Grey et al. Grey et al. disclose a multi-element ultrasonic transducer with non-conductive support members formed of insulative materials such as plastics or ceramics, this is interpreted as the housing and the transducer support is made of aluminum (claim 25).

Several geometries (including disc) are disclosed for the transducers (Fig. 3). It would have been obvious to one skilled in the art to use the focused ultrasonic transducer as taught by Grey et al. in the invention of Briskin et al. to provide more focused application of the sound treatment.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 5:30 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Henry M. Johnson, III/  
Primary Examiner, Art Unit 3739

/HMJ/  
5/18/2008